AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-10: (canceled).

11. (new): A method for assembling a porous membrane cartridge having a cylindrical barrel, a cap, and a porous membrane, the method comprising:

forming openings at a top end and rear end in the barrel, respectively;

forming the cap into a cylindrical shape having a fit-in portion configured to fit the portion outside the top end of the barrel, and forming in the cap a sandwiching face configured to abut with an opening edge of the top end and to sandwich the porous membrane between the barrel and the sandwiching face;

crushing a peripheral edge of the porous membrane and sandwiching the porous membrane; and

fixing the cap to the barrel so as not to be pulled out of the barrel by welding the opening edge and the sandwiching face by ultrasound.

12. (new): The method according to claim 11, wherein the opening edge of the barrel is formed to a taper where an inner perimeter side of the opening edge is more retreated than an outer perimeter side thereof, and wherein the opening edge is welded to the sandwiching face of the cap by ultrasound.

13. (new): The method according to claim 12, wherein the taper is formed with continuing into a flat portion formed at an outmost perimeter of the opening edge.

14. (new): The method according to claim 11, wherein a bead portion is formed as an energy director circularly on any one of the opening edge and the sandwiching face, and wherein the porous membrane is sandwiched and crushed by the bead portion, and the cap and the barrel are welded by ultrasound.

15. (new): The method according to claim 11, wherein a join portion is formed on an outer perimeter of the barrel and is made to abut with the opening edge of the fit-in portion of the cap, and wherein the cap and the barrel are welded through the opening edge of the fit-in portion and the joint portion.

16. (new): The method according to claim 13, wherein the flat portion is pressed to the porous membrane and vibrated during welding by ultrasound.

17. (new): A method for assembling a porous membrane cartridge including:

a cylindrical barrel having openings at a top end and a rear end, respectively;

a cap formed into a cylindrical shape having a fit-in portion fitted outside the top end, and having a sandwiching face configured to abut with an opening edge of the top end and to sandwich a porous membrane between the barrel and the sandwiching face; and

the porous membrane sandwiched between the cap and the opening edge of the barrel, the method comprising:

inserting the cap and the porous membrane in a cavity of an injection molding mold;

injecting a molding material in the cavity;

molding a shape of a portion of the barrel; and

fixing the cap to the barrel.